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ON SPONTANEOUS COMBUSTION.

FROM AN ESSAY READ AT THE LAST ANNUAL MEETING OF THE MED. SOCIETY OF TENNESSEE, BY JAMES OVERTON, M.D.

THE phenomenon of spontaneous combustion is by no means confined to the human body, but occurs much most frequently in materials not endowed with the peculiar attributes of vitality. This latter phenomenon, of the character of which neither physicians nor chemists have always succeeded in furnishing a satisfactory explication, is thought, however, with some unanimity of opinion, to depend upon the great affinity which certain substances are known to possess for the matter of oxygen, and that this principle is operative, whether the oxygen be derived from the atmosphere, from water, or any other material with which they are placed in contact. When water is the material which furnishes the oxygen to substances possessing this peculiar attraction for it, hydrogen gas is set at liberty, and by its combustion, or subsequent combination with oxygen, water is again produced. This property of spontaneous combustion in inanimate bodies, and which has been denominated *pyrophorescence*, but which upon the present occasion it may not be proper to examine in greater detail, possesses however great interest when viewed in relation to the conservation of individual property, and the promotion of the public safety and salubrity. For, besides that many conflagrations of wide extent are known to have had their origin in spontaneous combustion, it will not be doubted, that mixtures susceptible of this process, at least when their masses are considerable, vitiate the character of the surrounding atmosphere, and especially the air of habitations and restricted localities; since even before entering into sensible combustion, these substances absorb oxygen and disengage hydrogen gas, in which sulphur, carbon, and even phosphorus is often dissolved in quantities more or less abundant.

Among the various substances capable of spontaneous combustion, are particularly noticed masses of pit-coal, of manure, and especially of horse manure, of hay of different kinds, of wet or moist moss, of bales of cotton, moist or wet and closely packed in the holds of ships, and of green and humid vegetables in general, thrown together in large masses. Such is also said to be the character of masses of hemp impregnated with oil or grease; sail cloth and oil cloths, the different metallic sulphurets moistened, cotton and woollen cloths in large masses and embued with oil, old peltry, and old greasy cloths heaped up in masses; masses of tow impregnated with lard or oil, or flax or hemp seed, grains of the pulse kind in heaps, masses of chips or saw dust, some kinds of dried hides, nitric

and sulphuric acid placed in contact with expressed or essential oils, phosphoretted hydrogen gas, ammonia, sulphuret of antimony, arsenic, bismuth and zinc submitted to an atmosphere of oxygenated muriatic gas, quicklime moistened and in contact with bodies easily combustible, as chaff, dry wood, &c. &c., phosphorus, pyrophorus, potassium, sodium, &c. &c.

If, however, the phenomenon of spontaneous combustion be of a character to excite our surprise when viewed in connection with inanimate matter, with what additional wonder may we not contemplate its existence, when exhibited in the living body of an individual of our own species; and that, too, under circumstances indicating no important deviation from its ordinary physiological condition?

When we consider the large quantity of wood or other combustible material, which is demanded for the incineration of a human body, and when we calculate the great slowness with which this process is actually executed, we cannot but with great difficulty allow the possibility of its accomplishment in the living body, spontaneously, in the space of a few minutes, at a very low temperature of the atmosphere, and without the least sensible intervention of any material in a state of previous ignition. Notwithstanding this apparent improbability, nothing is more real than the existence of this singular phenomenon; which merits consequently the serious consideration of every physician, and of him especially who gives to the subject of medical jurisprudence any considerable share of professional attention. In truth, spontaneous human combustion enters directly and necessarily into the doctrine of equivocal deaths; and it is, consequently, essential that we should be competent to identify such cases, in order that we may not be exposed to the danger of ascribing to premeditated crime, or other causes, results which may have been the effect of a totally different cause. The following history is deemed not to be impertinent or useless in illustration of the truth of the suggestion, which makes an acquaintance with the phenomena of spontaneous combustion a part of the professional duty of every physician.

In 1725, the wife of a man by the name of Millet perished as the victim of spontaneous combustion, in the city of Rheims, in France. Her remains were found in the kitchen, at the distance of a foot or foot and a half from the chimney. Some portions of the bones of the head, of the inferior extremities, and some of the dorsal vertebræ, had alone escaped entire incineration. Millet owned or possessed a maid servant, who was young, and remarkable for her extraordinary beauty; and disreputable and alarming suspicions were soon started against him. Millet was subjected to all the rigors of a criminal prosecution, and finally convicted and condemned to be executed for the murder of his wife. He took an appeal from this decision, and, arraigned before a more enlightened tribunal, the case was ascertained to be one of "spontaneous combustion," and Millet consequently escaped at once from the horrors of the scaffold and the odium of having been the murderer of his own wife.

There is reported in a *Leipsic journal*, the history of a female, fifty years of age, very much addicted to the intemperate use of spirituous liquors, and who never went to bed except in a state of intoxication from this intemperance. She was found in the morning reduced to ashes.

The bones of the two femurs only, and some other small portions of the skeleton, had not been subjected to total incineration.

In the "*Acts of Copenhagen*," another medical journal, there is published the case of a woman, who made immoderate use of alcoholic liquors and took but little nourishment, having gone to sleep in her chair after her usual potation. She was found entirely burnt up, with the exception of the bones of the cranium, and the terminal phalanges of the fingers. In 1765, a noble lady of France, sixty years of age, and who was in the frequent habit of bathing her whole body in camphorated spirit of wine, was found burnt up, at a distance from her bed, from which it seemed that she had been driven by the heat and suffering attendant upon the accident. It was demonstrated that the fire in her apartment had had no agency in the production of her death. The candles in her room had burnt to their ends, and the wicks were still remaining entire in the candlesticks.

The room where this spontaneous combustion had occurred was filled with a humid soot, of the color of ashes; it had penetrated the texture of her curtains, and stained her bed linen.

Many other sufficiently attested cases of spontaneous combustion are doubtless to be found in foreign and domestic journals, and which have occurred at periods more or less remote from the present time. During the termination of the last century, and within the period included by the portion of the present already elapsed, these facts have been brought together with great care by different investigators. Upon the continent of Europe, the labors of Messieurs Lair and Kopp in this curious field of research have been crowned by great interest and success.

But it should not be forgotten that all the cases reported by these highly respectable authors were immediately fatal; and consequently presented to observation no other evidence of their cause and character than such as were deducible from the aspect of the remains of the combustion, and the character of other contingent and posterior circumstances.

We have, however, one case on record, and one only, so far as I am able to discover, of a different character; and which affords the highest interest, as the victim of it survived the catastrophe for some time, was seen by others during the progress of the combustion, and was entirely competent, after its occurrence, to detail the different circumstances which immediately preceded and followed, as well as those which accompanied the accident.

The case referred to is reported to have occurred in Italy, in the district of Livizzano near Florence, in the person of a priest, and to have been distinguished by the following circumstances. He had gone one day of its occurrence to a fair, at a small village distant some miles from his residence, upon matter of personal business. After having spent the greater part of the day in travelling about the environs of the place for the transaction of his business, he set out in the evening towards an adjacent village, and arrived at the house of a brother-in-law, who lived in this latter place, shortly afterwards. As soon as he arrived, he desired to be conducted to the apartment which was designed for his occupation; there, he passed his handkerchief between his shoulders and his shirt, and every person but himself having retired from the room, he directly

betook himself to the rehearsal of his breviary. A few minutes had scarcely elapsed, when an extraordinary noise was heard in the apartment where Bartholi the priest had just been placed; and this noise, mingled with which was distinctly recognized the cries of the holy father, having caused the inmates of the house to run to him with great haste, they found him extended upon the hearth and surrounded by a light flame, which receded in proportion as they drew near, and soon vanished away. He was immediately placed upon his bed, and such remedies as were at hand administered for his relief by his friends. On the succeeding day the physician who has reported the case was requested to visit him, who carefully examined the condition of the patient, and found the integuments of the right arm almost entirely detached from the subjacent muscles and hanging off from them, and the skin of the forearm in a similar condition. In the space comprehended between the shoulders and the thigh, the integuments were injured to an extent equal to that of the right arm and forearm. No indication of treatment appearing to the practitioner more urgent, he removed these mutilated fragments of the skin, and perceiving the commencement of mortification upon that portion of the right hand which had suffered most severely, proceeded to scarify it; but, notwithstanding this and other efforts for its restoration, the hand on the succeeding day, as had been apprehended, was found in a state of entire mortification, or sphacelus.

At the third visit, all the other parts of the body which had been submitted to the action of the combustion were in like manner in a state of sphacelation; the patient complained of burning thirst, and was agitated by horrible convulsions. His discharges from the bowels were fetid, and bilious in their aspect; and he was besides exhausted by continual vomiting, and suffered from intense fever and delirium. Finally, on the fourth day after the accident, at the end of two hours of comatose insensibility into which he had fallen, the unfortunate victim who was the subject of this observation expired. At the time of the last visit of his physician, and whilst he was plunged in the lethargic sleep just mentioned, it was observed with astonishment, that putrefaction had already made such progress, that the body of the patient, although still living, exhaled a stench which was insupportable to the persons around him; worms which had been generated in his body crawled out of the bed in which he lay, and the nails fell off from the fingers of the hand which had been most injured.

Having used all care to learn from the patient himself everything which had occurred in relation to the accident, he informed the physician that he felt, at the moment of the attack, as if some person had given him a severe stroke with a mallet on the right arm; and that at the same time he saw a flame of fire seize upon his shirt, which was in a moment reduced to ashes, except the wrist-bands, which had not in the slightest degree been touched by the fire. The handkerchief, which on his arrival he had placed between his shoulders and shirt, remained entire, and without the least vestige of combustion; his drawers were also equally exempt from injury; but his night-cap was totally consumed, whilst not a hair upon his head had been burnt.

The above facts are given by the reporter of the case, with the ap-

pearance of entire confidence, accompanied by assurances of their having been ascertained with much certitude.

The symptoms of the disease or injury produced by the accident were identical with those which are the usual effect of a severe burn; the night of its occurrence was calm, and the air free from impurities; and there was perceived in the chamber in which it took place no empyreumatic or bituminous smell, or other penetrating smoke, such as has often been noticed in apartments which have been the scene of accidents of a similar nature. The lamp which had just been filled with oil was dry, and the wick in a state of incineration; and this latter circumstance alone indicated the possible extension of the combustion from the body of the patient to any of the furniture or other materials of the apartment.

An instance of what has been esteemed *partial* spontaneous combustion, has recently occurred in the city of Nashville—it has given origin to the character of this essay—and as its phenomena as detailed by the subject of it, and its effects as exhibited to the observation of others after its subsidence, are corroborative of the truth of the history just given, we deem it worthy of record, and to be submitted to your present contemplation, in connection with cases of a like character which have occurred at a distance from us.

The subject of the following observation is a gentleman about thirty-five years of age, middle size, light hair, hazel eyes, sanguineo-lymphatic temperament, of habits entirely temperate in the use of stimulating drinks of any kind, fermented or alcoholic, with a constitution considerably enfeebled from long and zealous devotion to the sedentary and exhausting labor of scientific investigation. In early life he was very subject to derangements in the functions of the stomach and bowels; and at the present time suffers frequently from different modifications of these maladies, as costiveness, occasional diarrhœa, acidity of the stomach, heart-burn, &c. &c., with their usual train of sympathetic affections, involving parts of the organism at a distance from the primary seats of disease into a participation of their suffering.

At the time of the occurrence of the accident, he was afflicted with acidity of the stomach, and by an unusual and irritating quantity of the matter of urea in the secretion kidneys; for the relief of which, he was in the habitual use of aperients, ant-acids, &c.

Mr. H., Professor of Mathematics in the University of Nashville, was engaged as usual in his recitation room, in attendance upon the morning exercises of his class, till 11 o'clock in the forenoon. He then buttoned his surtout coat close around him, and walked briskly thus clothed to his residence, a distance of about three-fourths of a mile, taking exercise enough to produce a glow of warmth on the surface of the body, without inducing fatigue, but feeling at the same time his usual acidity of the stomach, for which he resolved to take some soda as a remedy within a short time. Having arrived at his lodging, he pulled off his over-coat and kindled a fire, by placing a few pieces of dry wood on three burning coals which he found in the fire-place, of the magnitude of two inch cubes each; and immediately left the fire, and retired to a remote part of the room and made his observations on the weight and temperature of the atmosphere as indicated by the barometer and thermometer, which were

suspended in that situation. He then took the dew-point by the thermometer. These operations, together with the registration of their results, occupied about thirty minutes. This having been accomplished, he went immediately into the open air, made observations on the hygrometer, and was beginning his observations upon the velocity and direction of the winds. He had been engaged in this latter process about ten minutes, his body all the while sheltered from the direct impression of the wind, when he felt a pain as if produced by the pulling of a hair, on the left leg, and which amounted in degree to a strong sensation. Upon applying his hand to the spot pained, the sensation suddenly increased, till it amounted in intensity to a feeling resembling the continued sting of a wasp or hornet. He then began to slap the part by repeated strokes with the open hand, during which time the pain continued to increase in intensity, so that he was forced to cry out from the severity of his suffering. Directing his eyes at this moment to the suffering part, he distinctly saw a light flame of the extent at its base of a ten cent piece of coin, with a surface approaching to convexity, somewhat flattened at the top, and having a complexion which nearest resembles that of pure quicksilver. Of the accuracy in this latter feature in the appearance of the flame, Mr. H. is very confident, notwithstanding the unfavorable circumstances amidst which the observation must have been made. As soon as he perceived the flame, he applied over it both his hands open, united at their edges, and closely impacted upon and around the burning surface. These means were employed by Mr. H. for the purpose of extinguishing the flame by the exclusion of the contact of the atmosphere, which he knew was necessary to the continuance of every combustion. The result was in conformity with the design, for the flame immediately went out. As soon as the flame was extinguished, the pain began to abate in intensity, but still continued, and gave the sensation usually the effect of a slight application of heat or fire to the body, which induced him to seize his pantaloons with one of his hands and to pinch them up in a conical form over the injured part of the leg, thereby to remove them from any contact with the skin below. This operation was continued for a minute or two, with a design of extinguishing any combustion which might be present in the substance of his apparel, but which was not visible at the time. At the beginning of the accident, the sensation of injury was confined to a spot of small diameter, and in its progress the pain was still restricted to this spot, increasing in intensity and depth to a considerable extent, but without much if any enlargement of the surface which it occupied at the beginning. A warmth was felt to a considerable distance around the spot primarily affected, but the sensation did not by any means amount in degree to the feeling of *pain*. This latter sensation was almost, if not entirely, confined to the narrow limits which bounded the seat of the first attack, and this sensation was no otherwise modified during the progress of the accident, than by its increasing intensity and deeper penetration into the muscles of the limb, which at its greatest degree seemed to sink an inch or more into the substance of the leg.

Believing the combustion to have been extinguished by the means just noticed, and the pain having greatly subsided, leaving only the feeling usually the effect of a slight burn, he untied and pulled up his pantaloons

and drawers, for the purpose of ascertaining the condition of the part which had been the seat of his suffering. He found a surface on the outer and upper part of the left leg, reaching from the femoral end of the fibula in an oblique direction, towards the upper portion of the gastrocnemii muscles, about three fourths of an inch in width, and three inches in length, denuded of the scarfskin, and this membrane gathered into a roll at the lower edge of the abraded surface. The injury resembled very exactly in appearance an abrasion of the skin of like extent and depth, often the effect of slight mechanical violence, except that the surface of it was extremely *dry*, and had a complexion more livid than that of wounds of a similar extent produced by the action of mechanical causes.

The condition of the pantaloons and drawers was next carefully inspected. The left leg of the drawers, at a point exactly corresponding with the part of the leg which had suffered injury, and at a point accurately correspondent to the abraded surface, were burnt entirely through their substance. They were not in the slightest degree scorched beyond this limit, the combustion appearing to have stopped abruptly, without the least injury to any portion of the drawers which had not been totally consumed by its action. The pantaloons were not burnt at all. But their inner surface opposite to and in contact with the burnt portion of the drawers, was slightly tinged by a thin frostwork of a dark yellow hue. The material of this color, however, did not penetrate the texture of the pantaloons, which were made of broadcloth, but seemed to rest exclusively upon the extremities of the fibres of wool which were the materials of its fabric. The coloring matter was entirely scraped off with the edge of a penknife, without cutting the woolly fibres, after which there remained upon the garment no perceptible trace of the combustion, with which they had been in contact. The pantaloons may be said, with entire propriety, to have suffered no injury of any kind from the accident. The drawers, which were composed of a mixture of silk and wool, were made tight and close at the ankle, and tied with tape over a pair of thick woollen socks, in such a manner as to prevent even the admission of air to the leg through their inferior opening. Considering the injury not to be of a serious character, Mr. H. bestowed upon its treatment no particular care or attention, but pursued his usual avocations within doors and in the open air, which was very cold, until the evening of the succeeding day. At this time the wound became inflamed and painful, and was dressed with a salve, into the composition of which the rosin of turpentine entered in considerable proportion. This treatment was continued for four or five days, during which time the wound presented the usual aspect of a burn from ordinary causes, except in its greater depth and more tardy progress towards cicatrization, which did not take place till after thirty-two days from the date of the infliction of the injury. The part of the ulcer which healed last, was the point of the inception and intensity of the pain at the time of attack, and which point was evidently the seat of deeper injury than any other portion of the wounded surface. About the fifth day after the accident, a physician was requested to take charge of the treatment, and the remedies employed were such chiefly as are usual in the treatment of burns from other causes, except that

twice a week, the surface of the ulcer was sprinkled over with calomel, and a dressing of simple cerate applied above it. In the space between the wound and the groin there was a considerable soreness of the integuments to the touch, which continued during the greatest violence of the effects of the accident, and then gradually subsided. The cicatrix is at this time, March 24th, entire; but its surface is unusually scabrous, and has a much more livid aspect than that of similar scars left after the infliction of burns from common causes. The dermis seems to have been less perfectly regenerated than is usual from burns produced by ordinary means, and the circulation through the part is manifestly impeded, apparently in consequence of atony of its vessels, to an extent far beyond anything of a similar nature to be observed after common burns. Since the wound has healed the health of the patient has been as perfect as usual, and while the wound continued open, his ordinary occupations were interrupted by a week's confinement only to his chamber. The accident occurred on the fifth of January of the present year, the day intensely cold and the thermometer standing at only eight degrees above zero, sky clear and calm, and the barometrical admeasurement of the atmosphere being 29.248. Such is the history of the case of partial spontaneous combustion, which has recently occurred in this city. The facts have been stated as nearly as practicable in the words of the sufferer himself, and are consequently entitled to all the credit attributable to any statement of a similar character, which is or can be supplied by the annals of the profession. The character of the accident bears a striking similitude to the case of partial spontaneous combustion already noticed, and may hence, to future investigators, contribute not unimportant aid in the discussion of the subject which is the object of this essay.

[Some of Dr. O.'s remarks on the *causes* of spontaneous combustion, will be given in a future number.]

CASE OF OVARIAN PREGNANCY.

BY M. F. COLBY, M.D. OF STANSTEAD, LOWER CANADA.

[Communicated for the Boston Medical and Surgical Journal.]

I WAS summoned on the 13th of July to assist in the post-mortem examination of the body of Mrs. O. King, of Sherbrooke, whose sudden dissolution had caused considerable sensation in the vicinity. From information derived from her intelligent physician, Dr. Watson, as well as from the friends of the deceased, we learned that Mrs. K. had weaned her second child of fifteen months, about three weeks previous; that she had enjoyed her usual health till the evening preceding her death, with the exception of some slight pain in the hypogastrium, which she had experienced a few weeks, and which she was disposed to assign to some injury which she might have received in her last accouchment. Soon after weaning her child, she applied to Dr. W. for some emmenagogue pills, assuring him, at the same time, that she was not pregnant, as she had not experienced her usual symptoms. On Saturday, about 11 o'clock, P. M. while engaged with company, she felt a sudden and vio-

lent pain in the lower part of the abdomen. This was succeeded by faintness and great prostration of strength. Dr. W., who was immediately called, found her nearly pulseless;—her general appearance being such as he had often witnessed in the collapse of cholera. She complained of a diffused soreness and indescribable distress through the whole abdomen, which was full, but not tense, and gave to the hand the sensation of dry coldness. She vomited much for a time, and the ejected matter was apparently stercoraceous. There was slight pain in the back and thighs—the bowels were obstinately confined, and the secretion of urine was wholly suppressed. She had turns of delirium and fainting at intervals of about an hour—complained some of headache, but no thirst. At times there was a slight re-action of the pulse, but there was no revival of heat on the surface. After passing a night of intense suffering, Mrs. K. expired at half past 8 on Sunday morning, aged 27.

By request, an examination of the body was made on Monday, P. M. by Dr. Jenks of Melbourne and myself, in presence of several medical gentlemen. On opening the abdomen, we found two or three quarts of bloody serum diffused in the peritoneal cavity. A firm dark coagulum occupied the whole of the hypogastric region, extending into the left hypochondrium, and a thin stratum of coagulated blood was spread over and firmly adherent to the extensive portions of the omentum and intestines. On carefully removing portions of the coagulated blood, we found near the place where the uterus emerges from the pelvis, at the period of quickening, a fœtus of full four months, enclosed in its proper membrane and floating in its liquor amnii. On clearing away the coagulated blood, which surrounded it, we found its membrane attached to a portion of the inner surface of the left ovary, from which body it had just escaped by laceration of its entire superior edge. The lacerated edge of the ovary was about three lines in thickness.

The collapsed organ was nearly the size of a hen's egg, free from all morbid attachments; and presented all the appearance of the healthy ovary, excepting its size and lacerated edge. The portion of the fallopian tube next its fimbriated extremity was adherent to a portion of the fœtal sac. The fœtus was without placenta; the cord being connected with that portion of the membrane remote from its connection with the ovary. Its membrane was highly vascular. One artery, beautifully injected with red blood, was seen ramifying on its surface—its course being in a direction to the place of insertion of the fœtal cord. From the engorged state of the artery, it is probable that the vital actions of the fœtus continued till the life of the parent was extinct. The uterus was pressed low to the right side of the pelvis, but no perceptible change had taken place in its body, its size and internal appearance being the same as usual in those who have once borne children.

It was with much regret that we were unable to gain permission to preserve the entire ovum with the parts in immediate connection, as they demonstrated the actual existence of ovarian pregnancy. This was more desirable, as some highly eminent modern writers on midwifery, particularly Velpeau, deny its existence altogether.

From the attachment of the fœtal sac, in this case, we are led to infer that the vivified ovule was either detached from its nidus and become

entangled in the interstices of the coats of the ovarium in its passage to the fallopian tube, or that, retaining its original situation, its vesicular covering, which according to Dr. Graaf "is supplied with bloodvessels and preparatory nerves," might have performed the function of placenta to the embryo. In either case the development of the ovum would soon cause it to occupy the whole of the parenchymatous portion of the ovarium, and its further enlargement would be resisted in some degree by the tough fibrous envelope of that organ. This resistance would be far greater than either that of the accidental sac which surrounds the ovum in cases of its attachment to the peritoneum, or of the proper membranes of the fallopian tube in cases of tubal pregnancy. The newly organized sac would form adhesions with surrounding parts, and its growth would correspond with that of the ovum; while in the latter case, the membranes of the tube would dilate in a direction where there was the least resistance. The ovarium would become compressed by the enlarged ovum, and we might expect to find it entire upon its posterior and inferior surface, unless from rupture of the tube its character had become lost in the general adhesion formed around the fœtus. The amnios would be more liable to rupture in this, than in ovarian pregnancy, from the less resistance of its envelopes.

From the firm and ligamentous structure of the proper coat of the ovarium, we might anticipate the result we have witnessed in the case of Mrs. K. After the first development of fœtal life, its contractile power would increase from the afflux of the fluids to this organ. This would meet with an opposing force in the increasing size of the ovum. These opposing forces would continue to operate till its contractility became exhausted, and its texture yielded to the distending force.

Had the ovule in the present case been detained between the peritoneal and proper coat of the ovary, we cannot account for the appearance of the lacerated edges, unless it is by the assumption that fleshy fibres were developed by a generative action, and a new coat or matrix formed, possessed of strong contractile powers. This new coat, in contact on the one side with the peritoneum, on the other with the fibrous coat of the ovary, would acquire growth with that of the ovum from the continued operation of the cause which brought it into existence. As this increase of growth must result from interstitial nutrition, as well as from the organization of new fibrous matter, I cannot conceive how the newly formed sac could be liable to spontaneous rupture. This self-destruction of the *pericarpium* (to use a botanical phrase), before the perfection of its seed, is so opposed to the established economy of nature, that we cannot for a moment admit that the unerring principle which should guide in the formation of an enclosure for the new embryo, would endow it with a more limited vitality than would be required for the full development of the fœtus.

On this principle, independent of the anatomical facts, we might contend that the investing covering in this case was not formed for the protection of the ovum, but that the rudiments of the embryo having been casually arrested within the ovarium, that organ served as its matrix till its texture yielded to internal force. The diagnosis, in cases like this, must be somewhat difficult from the similarity of the symptoms

to those which occur in some cases of intestinal rupture. The prominent symptoms, such as sudden pain succeeded by great prostration, universal collapse, coldness, inverted peristaltic action of the stomach and intestines, suppression of the urinary secretion, with constipation and a diffused and extreme soreness over the whole abdomen, suddenly supervening on the first attack, are identical in both cases.

The only diagnostic symptoms which can be relied on, are such as supervene from excessive loss of blood. From this cause there would be less inflammatory irritation of the peritoneal surface, and consequently less tension and heat of the abdomen.

Stanstead, L. C. August 5, 1835.

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NARCOTIC SUBSTANCES.*

AN octavo pamphlet of twenty-nine pages, in double columns, by Dr. Allen, of Middlebury, Vt. extensively known as an industrious, conscientious writer, has been recently received at this office, which treats in a learned, yet popular manner, of the effects produced on the human system by distilled spirits, wines, and tobacco.

In the commencement of the Essay, the author discovers the mildness of his character and his earnestness in the great temperance reformation of the age, by a candid, philosophical examination of the actual properties of the several narcotics which, for several centuries, have been making melancholy devastation in all ranks of society, and extending their baneful influences into the remotest countries of savage life and barbarism.

Satisfied of the correctness of Dr. Allen's deductions, and viewing at the same time the philanthropic object by which he must have been actuated while pursuing the series of investigations embodied in his essay, we congratulate him on the success of his judicious and well-timed labors. This thesis was not written exclusively for medical men, and yet we cannot doubt that it will hereafter be regarded by them as one of the most concise and practically valuable dissertations on the true nature of the several narcotic substances in common, and therefore destructive use. Under the direction of those benevolent institutions which are endeavoring to regenerate our beloved country, and ward off the curse of intemperance, it should be immediately stereotyped and circulated extensively, and rapidly, too, throughout the union.

Upon the subject of wines, we are furnished with some historical memoranda, probably new to the majority of readers. After explaining Paul's advice to Timothy, in relation to taking a little wine for the stomach's sake, the writer gives an account of ancient wines, which appear to have been very unlike most of the vile stuff palmed off upon modern purchasers.

"The oriental fermented wines," he remarks, "were less obnoxious than our best imported pure wines. And it is evident that the best and

* An Essay on Narcotic Substances, embracing Intoxicating Liquids, Tobacco, &c. By JONATHAN ALLEN, M.D. Middlebury, Vermont.

most valued of the ancient wines contained no intoxicating principle whatever. They were, says Chaptal, *mere extracts*, evaporated juice of the grape. Both the Greeks and Romans appear to have frequently concentrated their wines either by spontaneous evaporation or boiling. Whereas, after having undergone fermentation, at the common temperature of the air, wines, especially the weaker, like those of Judea, could be kept to a very great age without becoming impaired in quality. The moderns keep no wine to such an age as that of the ancients. In Italy and Germany there are scarce any to be found which has been preserved more than fifteen years. In France, the wines that keep best are those of Nantz and Orleans, and these are reckoned at five or six years superannuated.

"Among the Romans, the age of wines was the criterion of their goodness. Thus the wine compared by Pliny to honey, had been made two hundred years before ; indeed, wines of a hundred years old and upwards, seem not to have been uncommon among the luxurious citizens of ancient Rome. And since the Jews became subject to the Roman power, and had frequent intercourse with Greece, it is reasonable to conclude that wines of great age were also esteemed by this admired people."

"The best ancient wines were reduced to syrups, and in some instances, even to dryness ; and thus prepared, they were capable of being preserved to great age. Aristotle states that the Arcadian wines required to be diluted with water before they were drank ; and Pliny mentions wines as thick as *honey*, two hundred years old, which it was necessary to dissolve in warm water, and filter through linen before they were used.—'This was the case with the wine of Cæcuba, according to Martial : ' *Turbida sollicito transmittere Cæcuba sacco.* '"

Unfortunately, the limits of the Journal forbid the republication, this week, of anything more than a few paragraphs. We venture, however, to copy the following, even to the exclusion of other matter.

"Dr. Rush, during five years careful observation in the populous city of Philadelphia, could find only four or five persons who had been intemperate in drinking ardent spirit, that lived to the age of eighty years. These 'had all been day laborers or had deferred drinking till they began to feel the languor of old age.' Dr. Hosack has found that one in ten of the Society of Friends lives ordinarily to the age of eighty years, while the average of human life is such that only one in forty lives to that age. This disparity he very justly attributes to their total abstinence from distilled spirit. From the most accurate calculation it has been ascertained that the difference in the duration of life between the sober and the intemperate, is *thirty years* ; and between the moderate drinker and the abstinent, it may fairly be estimated at *fifteen years*. This shortening of human life from the use of alcoholic drinks, is in a good degree in consequence of the derangement produced on the digestive organs and the nervous system. A gentleman who destroyed himself in the meridian of life by the use of spirit, short of inebriation, continued for some years, informed the writer that he had impaired the tone of his stomach to such a degree that for the last year he had not experienced the sensation of hunger, and that he had for that time taken little or no food except what he could drink, eating was so unpleasant to him. Long life much depends on the healthy state of the stomach. Old people commonly have a good appetite ; when that fails, life is extinguished."

The author's remarks on the pharmaceutical use of alcoholic solutions, and on the nature and use of tobacco, will be noticed hereafter.

It is not customary with us to bestow commendations like these on ephemeral productions; but we have taken a deep interest in the facts contained in Dr. Allen's Essay, which cannot be gainsayed either by physicians or scoffers. He has done most excellent service.

We are not aware that any copies of this Essay are for sale in this city, but we should be happy to transmit any order to the publisher.

Indigo become a Medicine.—From an abstract of an article in Rust's Magazine, No. 3, 1835, an account is given of the recent administration of indigo in epilepsy. A pattern case, detailed at length, in order to show how it operated like a charm, is altogether too long for republication, and unsuitable to abridge. Dr. Ideler has the reputation of having first brought it into notice as a remedy. The manner of preparing the indigo is in the form of an electuary, containing half an ounce, powdered—which, to one patient, at first, was given in two days—and next, in one. Even six drachms have been given in twenty-four hours. After mature reflection, since reading the paper containing the cases referred to, we are decidedly of the opinion that the medicinal properties of indigo are too feeble to be relied upon in any disease.

American Medical Books.—It is a matter of surprise that more medical books do not originate in the United States. Notwithstanding the difference of climate in this country from that of England, varying indeed from torrid heat to polar severity, foreign works which make little or perhaps no reference to our circumstances, are consulted as infallible guides by the young practitioner. There is no want of materials, certainly, and it would be defamatory to accuse the profession of being incompetent to the business of writing both learnedly and systematically on the diseases with which they are most familiar. With the exception of the medical botany of the Northern and Middle States, we are accused of having made no brilliant achievements in the theory and practice of medicine.

Recent Casarean Operation.—On the 22d of June, Mrs. Bate, wife of a bricklayer, at Birmingham, England, at the full period of pregnancy, necessarily underwent this hazardous operation, when every other expedient to save both mother and child had been resorted to. A consultation was held with Mr. Ingleby,—after which Mr. Knowles proceeded to operate, in the presence of several professional gentlemen, and was eminently successful, as the mother and infant were both doing well at the last accounts. The child was baptised *Julius Cæsar*. It will be recollected that the story has been handed down from the ancients, that the Roman Emperor of that name was brought into existence by a similar process—whence the name of the operation.

Medical Reporters.—Within a few weeks, medical lectures will be recommenced in several schools within a few hundred miles of Boston, from all of which, we should be exceedingly happy to receive abstracts of the lectures on theory and practice, surgery and medical jurisprudence. Such a course would be productive of positive advantage to the institution, and in the sequel beneficial to the whole profession. We therefore invite the attention of teachers again, to the consideration of the expediency of allowing reporters to transmit, for weekly publication, synopses

of their lectures. There is not a medical institution of any celebrity in England or France, that has not been elevated, and at the same time especially benefited, by the industry of its reporters.

Ovarian Pregnancy.—We invite the attention of our readers to the extraordinary case reported in the Journal, the present week, by Dr. Colby. Were our readers as careful, generally, to communicate their observations, as this gentleman, an immense mass of important information would be accumulated, alike honorable to themselves and useful to the profession.

Medical Lectures.—We take the liberty of reminding those in the study of medicine who are interested in the Berkshire Medical Institution, that the annual course of lectures will commence at that college on the 27th instant—which falls on the last Thursday of August.

From an intimate acquaintance with the qualifications of the faculty, having formerly been several years associated with the School, we feel warranted in saying that the course of instruction is inferior to that of no institution in the interior.

Case of Twins, one presenting the Color and Form of a Mulatto.—Ch. A., 22 years of age, was delivered at La Charité, Berlin, on the 25th of January, 1832, of two female children, seven months old. The second was immediately distinguished from the first born, by a peculiar blue-gray color of the face, hands, &c. and drew the attention of the mother, who exclaimed, "I thought so."

In size and weight both children resembled one another, but the head of the second child was much more flattened at the sides; the forehead was low and compressed; the eyes were more distant from one another; the lips thick, the nose broad, and turned up; the color of the face, hands, and feet, resembled that of a person who had taken nitrate of silver; it was also remarked that the umbilical cord of the first child was white, while that of the second was dark.

Both died a few hours after birth, and were presented to the Royal Museum by M. Rudolphi.

On being questioned, the mother would give no information about the children, but some time after confessed that she had "gone to see" a black in the month of October past. However, it was discovered that for a long time previous to January she had been a domestic in a house where a negro was in the habit of constantly going.—*Lancet*.

We have an indistinct impression that a similar phenomenon occurred in the western part of Massachusetts, some fifteen or twenty years ago. Any physician acquainted with the particulars, will confer a favor by communicating the facts to the Journal.

Re-Vaccination.—The number of Rust's journal from which we have extracted the foregoing, contains the following particulars relating to re-vaccination, which we extract from a circular addressed by the physician-general of the Prussian forces to the army-surgeons in the year 1833:

1st. Number of persons vaccinated, 48,478.

2d. Of these had traces of former vaccination, 37,286 ; doubtful, 7641 ; scarcely any trace, or none, 3551.

3rd. The vaccination and its effects were regular in 15,269 cases ; irregular in 12,203 ; without any effect in 21,006 cases.

4th. The individuals in whom the vaccine did not take were again re-vaccinated with effect in 784 cases ; without effect in 3377.

5th. The number of re-vaccinated soldiers attacked during the course of the year with pocks was fifty-four varicella, fifty varioloid, true small-pox, twenty.—*Ibid.*

Death of a female occasioned by the ignorance of an Accoucheur.—A horrid event, which can scarcely be considered credible, is said to have happened recently to a young married female at Seclin. An *officier de santé* was called to deliver the subject of the case, who had arrived at the full term of utero-gestation. He made several attempts to turn the child, which presented by the arm, and finally succeeded as was thought very well, as the child was delivered alive. Called again by the parents of the patient at about three o'clock in the morning, on account of a violent pain, he proceeded to extract the masses of coagulated blood which had collected in the uterus, and other substances, the nature of which could not be ascertained by the assistants. The woman nevertheless died about seven o'clock, suffering excruciating torment. On the examination of the body, it was found that the uterus had been ruptured, and that the mass which had been extracted with the concula, was a portion of the intestines, which the operator had severed with his finger nails!

Jour. des Connaissances Médicales, Feb. 1835.

Precocious Menstruation.—Dr. Strohmayer remarks, that in 1816, he saw in the vicinity of St. Polten, a female child, aged nineteen months, who was generally affected during the course of one day with a mucous discharge from the vagina, and for days afterwards with a free discharge of blood, which recurred for some time at regular monthly periods like the menses. The child in other respects was healthy, passed through the vaccine disease kindly, and had all her functions performed regularly up to the age of three years, at which period she died of hectic fever.—*Strohmayer Medecinisch, Praktisch, Darstellung, Wien.*

Medical Graduations.—Twenty-eight medical students were admitted to the degree of Doctor in Medicine, at the recent commencement at Dartmouth College, Hanover, N. H.

Honorary Degree.—That of M.D. was conferred on Dr. Moses Shaw, of Wiscasset, Maine, on the 5th, at Waterville College.

TO CORRESPONDENTS.—The Communications of Drs. Chandler, C. Smith, and Ranney, will receive early attention.

DIED.—At Cohoes Falls, near Albany, N. Y. Dr. Joseph Underwood, formerly of Pawtucket, R. I.—In Mississippi, Dr. Joseph Cowan, late of Stanton, Va.

Whole number of deaths in Boston for the week ending August 15, 45. Males, 20—Females, 25.

Of hooping cough, 4—consumption, 6—diarrhœa, 2—infantile, 4—measles, 3—bowel complaint, 9—inflammation of the bowels, 2—old age, 3—bilious fever, 1—liver complaint, 3—spasms, 2—dysentery, 1—brain fever, 2—apoplexy, 1—drowned, 1—dropsy on the brain, 1—hip complaint, 1—croup, 1—convulsions, 1—cholera infantum, 1—worms, 1—unknown, 1. Stillborn, 2.

BERKSHIRE MEDICAL INSTITUTION.

The Annual Course of Lectures for 1835 will commence the last Thursday in August, and continue fourteen weeks.

H. H. CHILDS, M.D. *Theory and Practice of Medicine and Obstetrics.*

E. BARTLETT, M.D. *Pathological Anatomy and Materia Medica.*

C. DEWEY, M.D. *Botany, Chemistry and Natural Philosophy.*

W. PARKER, M.D. *Anatomy, Surgery and Physiology.*

JOHN FRISSELL, A.M. *Demonstrator of Anatomy.*

The Trustees of the Berkshire Medical Institution, in issuing their annual Circular, believe themselves justified in promising to those young men, whose local situation or whose personal predilections may lead them to a connection with the School, a course of public instruction as thorough, efficient and practical, as can be enjoyed at any of our various medical establishments. To the branches heretofore taught, which have been the same as in other American Medical Schools, arrangements have been made for the addition of a course of Lectures on PATHOLOGICAL ANATOMY, to be illustrated by morbid specimens and by an extensive series of colored representations of diseased structures.

By legalizing the study of Anatomy, the Legislature of Massachusetts has furnished its Schools with superior advantages for Practical Anatomy. It has also, by this provision, most effectually guarded the sepulchres of the dead against all violation.

Fellows of the Massachusetts Medical Society, and those who have received the degree of M.D. are admitted gratuitously to the Lectures. The degree of M.D. is conferred at the annual Commencement of the Institution and at the Commencement of Williams College. The requisitions for the degree of Doctor in Medicine, are—three full years study under a regular practitioner, attendance on two full courses of Medical Lectures in regularly established Medical Institutions, an adequate knowledge of the Latin language, and a good moral character.

Fee for the whole course of Lectures is \$50; those who have already attended two full courses at an incorporated Medical School, pay \$10. Graduation, \$12. Board, including room rent, washing and lodging, \$1 75 per week.

In one week after the close of the Public Lectures, commences the winter Reading Term, which continues 12 weeks, and is devoted to Practical Anatomy, the Principles and Practice of Surgery, and Obstetrics.

By order of the Trustees,

C. DEWEY, *Secretary pro tem.*

Pittsfield, July 1, 1835.

NOTE.—The following authors are recommended to be used by the students during the Lecture Term. On *Anatomy*, C. Bell, Horner, Cloquet, and Wistar. *Surgery*, S. Cooper, W. Gibson, and Sir A. Cooper's works. *Practice and Theory*, Gregory, Good, Eberle, and Dewees. *Obstetrics*, J. Burns, Dewees, and London Practice. *Materia Medica and Medical Jurisprudence*, Beck, Chapman and Eberle. *Chemistry*, Brande, Turner and Beck.

July 15—3t

VACCINE VIRUS.

PHYSICIANS in any part of the United States may hereafter be furnished with pure vaccine virus, by addressing the editor of the Boston Medical and Surgical Journal—inclosing one dollar. Letters must be post-paid, or they will not be taken from the Post Office. The virus will invariably be sent by the first mail, unless some other mode of conveyance is directed. Ten charged quills, an ample quantity for meeting any sudden emergency, and certainly sufficient to propagate a supply from, will be securely packed in a letter. The gentleman who has undertaken to keep the virus, will faithfully supply that which is positively genuine and recently taken. It will also be furnished on application at the Medical Journal office.

Boston, March 4, 1834.

MEDICAL SCHOOL IN BOSTON.

THE MEDICAL FACULTY of Harvard University announce to the public, that the Lectures will begin on the first Wednesday in Novem., and continue thirteen weeks, after which time the regular course will be considered as terminated. But for the following four weeks, the Hospital and the Dissecting room will be kept open, and some Lectures will be given, without additional expense, to such students as may choose to remain.

The following Courses of Lectures will be delivered to the class of the ensuing season:

	by		Fees
<i>Anatomy, and the Operations of Surgery,</i>	JOHN C. WARREN, M.D.		\$15
<i>Chemistry,</i>	JOHN W. WENSTER, M.D.		15
<i>Midwifery and Medical Jurisprudence,</i>	WALTER CHANNING, M.D.		10
<i>Materia Medica,</i>	JACOB BIGELOW, M.D.		10
<i>Principles of Surgery and Clinical Surgery,</i>	GEORGE HAYWARD, M.D.		10
<i>Theory and Practice of Physic, and Clinical Medicine,</i>	JAMES JACKSON, M.D. and JOHN WARE, M.D.		15

By an additional act of the Legislature of Massachusetts, the opportunities for the study of Practical Anatomy are now placed upon the most liberal footing. While the violation of sepulchres is prevented, it is anticipated that an ample supply of subjects for the wants of science, will be legally provided at a small expense.

The Massachusetts General Hospital is open without fee to Students attending the Lectures of the physicians and surgeons. This Institution contains about sixty beds, which are, most of the time, occupied by patients who are subjects partly of medical, and partly of surgical treatment. Clinical Lectures are given several times in each week, and surgical operations are frequent. The number of surgical operations during the last five years has averaged about seventy in each year.

To the Medical College is attached a Medical Library, a costly and extensive Chemical Apparatus, and Collections illustrative of Midwifery, Materia Medica, and Healthy and Morbid Anatomy.

Boston, June 12, 1835.

June 24—tN1.

WALTER CHANNING, *Dean.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL is published every Wednesday, by D. CLAPP, JR. at 134 Washington Street, corner of Franklin Street, to whom all communications must be addressed, post-paid. J. V. C. SMITH, M.D. Editor. It is also published in Monthly Parts, on the 1st of every month, each Part containing the weekly numbers of the preceding month, stitched in a cover.—Price \$3.00 a year in advance, \$3.50 after three months, and \$4.00 if not paid within the year.—Every seventh copy, gratis.—Postage the same as for a newspaper.